Wireless Fills In
New Technology is Shaping Community Networks
by Vicki Suter, I.T. Distributed Computing Analysis & Support

Thanks to advances in wireless technology, truly mobile computing is just around the corner for many users. Simply speaking, some laptop computer users are enjoying the same connectivity now enjoyed by those who use cellular telephones, and this convenience may come into the reach of many more in the next year or so.

In the traditional computing environment, computers are networked with either direct wire or through the telephone lines with modems. Information can be transmitted only between computers physically connected to the network.

As its name implies, wireless networking will allow users to transmit information through mediums that do not require physical connections. So, theoretically speaking, you could send e-mail from a chair lift in a snowstorm or from a sandy beach on a tropical island.

Existing wireless communications include radio and television broadcasting, cellular telephony, microwave, and satellite services. Wireless technologies have not yet evolved sufficiently enough to serve as replacements to traditional wire-based computer networks. Nonetheless, wireless technologies do promise — yet expensive — solutions in certain niches or gaps not well-served by wire.

With the development of wireless applications, the technology

Odyssey '96 Will Showcase Creative Uses of Technology

Everything from computer-assisted learning programs to wireless communications will be demonstrated at Odyssey '96, an all-day technology showcase scheduled for Thursday, May 23, in Freeborn Hall.

Sponsored by the Network 21 Budget & Policy Oversight Committee, the General Library, and Information Technology, Odyssey '96 will give members of the campus community an opportunity to demonstrate and discuss creative uses of information technologies. Like the technologies to be showcased, the event is designed to be an interactive medium.

Proposals are being accepted in six tracks:

- Expanding the Classroom — Electronic Communication and Coursework on Computer;
- Collaborating Across the Network;
- Turning Data into Information;
- Online Images — Building Digital Libraries;
- Technology Applied to Research — Today & Tomorrow;
- The Mobile Worker.

In addition to the technology showcase, presentations will be scheduled throughout the week by technology leaders in higher education. Stuart Lynn, the recently appointed Associate Vice President, Information Resources and Communications for the UC Office of the President, will give a talk entitled "Using Technology to Build an Interactive University."

Gerry Bernbom, Assistant Director for the Office of Information Technologies at the University of Indiana, will discuss "Data as an Institutional Resource."

Coming from the University of North Carolina at Chapel Hill is John L. Oberlin, Director of Finance & Planning for the Office of Information Technology. He will discuss issues related to technology financing.

Richard West, Vice Chancellor of Information Technology (CAIT) is an ideal medium for sharing information. Creativity is expected from campus representatives recently agreed to build a "smart" community. That was just one of the conclusions reached at the "Yolo Smart Region Telecommunications Summit," recently held on campus in the Buehler Alumni/Visitor Center.

Representatives from both the public and private sectors attended the Feb. 27 event, which was organized by Vicki Suter and Joan Gargano of Information Technology and co-hosted by the Davis Community Network, a local non-profit organization.

Attending were representatives from UC Davis, Davis Unified School District, Yolo County the City of Davis, the City of Woodland, the Davis Chamber of Commerce, State Department of Education, Davis Downtown Business

NetDay '96

UC Davis staff were among the many volunteers participating in NetDay '96 on Saturday, March 9. Marilyn Sharrow, University Librarian, and Carole A. Barone hosted an open house at the CAIT to demonstrate Internet tools for K-12 education and to thank volunteers for participating in the event. Look for a follow-up in the April I.T. Times. More information is on the Web at http://www.netday96.com

Site License News Can Come to You

To receive regular e-mail updates about software site license opportunities and volume purchase discounts, you may subscribe to the "site license" listerv. Send e-mail to listerv@ucdavis.edu and leave the subject line blank. In the body of the message type: Subscribe site-licenses <your firstname> <your lastname>.

Oracle on the Web

For information about Oracle software opportunities available to campus users, please visit the UC Davis Oracle Web site at http://oracle.ucdavis.edu

Meet at the CAIT

Just a reminder. The conference table in the Center for Advanced Information Technology (CAIT) is an ideal place for small class meetings or group discussions. The horseshoe-shaped conference table is equipped with terminals and projecting equipment. Participants can access online information during the discussion and project information from individual screens for viewing by the entire group. The CAIT is located on the first floor of Shields Library. Call 752-3711 or send e-mail to oracle-advanc@ucdavis.edu

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Quotables

"The Web as we know it today is dead... because it’s going mobile into something else very quickly and be unrecognizable within 22 months."

— Paul Saffo

— Futurist

Courtesy of Edupage
Watching Over Mothra

Remem-
ber Mothra? No, not the giant moth-
creature from the S u n m o v i e M o t h r a—
the access world you were asked to in-
type in when you opened your campus computer ac-
count. Dan Dorough of I T S Di-
tributed Computing Analysis and Support (DCAS) is one of the two
keepers of Mothra, along with Larry Johnson, also of DCAS. Mothra— I T S account manage-
ment system and online direc-
tory—is a database containing all of the campus “easy-access” com-
puter accounts, the UCD MailID central electronic mail addresses, and the “Whois” electronic direc-
tory.

Dorough and Johnson are the system architects for Mothra. Dorough’s responsibility is for the “front end,” which entails developing applications and tools to en-
able I T S staff and customers campuswide to use the database, while Johnson implements the “back-end,” getting information into the database.

Dorough wears another hat as well as the system architect of the Aspiga database, which is the cam-

paign host name database for the UC Davis network. In that role, Dorough serves as both the system architect, having built all the appli-
cations and set up all the processes, and as the hostname clerk in order to keep on top of what information people need to make the tools as easy to use as possible. He also wrote the system database for the Davis Community Network, which maintains all the DCN cus-
tomer records and computer ac-
counts.

And he’s responsible for peer-
ing into the future, investigating future technologies — like client/ server computing — for possible use in DCAS.

Now, ask him how Mothra got its name and he’ll confess—it re-
ally is named after the giant moth-
creature from the B movie. One reason: it swoops down and gath-
ers up information.

Site License Coordinator Works to Keep Campus Informed

As Site License Co-
ordinator for Informa-
tion Tech-
ology, Leigh Ann
Giles wants
Leigh Ann Giles

right decisions about software licenses, send e-mail to itlc@ucdavis.edu

Software are Support for Workstation Users

If you use a SUN, DEC, or SGI workstation, this Vendor Software Library (VSL) news is for you.

Solaris, 2.5, the newest version of the Solaris Operating Sys-

tem is now available.

Version 7 of the VMS Operating System for the DEC Alpha is available.

New SGI CD-ROMs include Open Inventor 2.1, IRIZ6.1 (64 bit processors only), and the Support Advantage disks.

The VSL is establishing new se-
curity procedures, and access to the Sun compiler licensing servers is now restricted to VSL members.

The UCD Oracle license is now part of the VSL program, and departments may purchase a year of access to all Oracle soft-
ware via the CD-ROM juke-
box, FTP and CD duplications services still will be available for individual software titles.

If you have questions about the VSL program, e-mail to vsl@ucdavis.edu.

Collaboration Is Key to Community Network

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Association, local businesses and Davis Community Television. Calling themselves the Yolo County Regional Net, the group
agreed to hold regular meetings to discuss their experiences with computer technologies — to talk about their goals and the obstacles encountered trying to meet these goals.

“Smart” refers to a community that changes the way it works by using information technology and by making that technology available to user-friendly to its resi-

dents.

As a result of the summit, the following action items were slated for further collaboration:

» Map the existing network infras-
structure in the region;

» Map the training and techni-
cal resources and develop
methods for sharing and lever-
aging existing resources;

» Establish public kiosks through the Yolo County region;

» Provide a regional training and demonstration center to use for training and demonstra-
tions to educate, inspire and persuade;

» Provide a regional help desk;

» Recruit private sector involve-
ment immediately;

» Present a series of follow-up
meetings and seminars to at-
tract additional regional agen-
cies who wish to join this col-
laborative effort.

One such event to further un-
derstanding of the current net-
working environment is the Odys-
sse 96 technology showcase, scheduled for May 23.

Also in store are future meet-
gings promoting partnerships be-

tween the public and private sec-
 tors.

For further information on the work of the Yolo County Regional Net, look on the World Wide Web at http://rohan.sdsu.edu/grad/ indcomm/smart.html

At Home on the Web

Student Housing
http://www.housing.ucdavis.edu

This site contains information for pro-
spective and current residents, under-
graduate and graduate, living in the residence halls, student family hous-
ing apartments, and cooperative liv-
ing groups. Summer Housing oppor-
tunities and Conference Services are described as well. Important dates, copies of residence hall contract and student family housing leases, quar-
terly telephone rates, and some descriptions are provided. Current links to other pages include: Campus Information, Campus Recreation, Parking Services, UCdogs Bookstore, City of Davis, Child Care liaison, and a number of other Student Affairs de-

Partners. There is a faculty and staff directory in the form of a searchable index. E-mail inquiries to the Student Housing Office can be found from the page as well.

Medieval Studies
http://pubweb.ucdavis.edu/ Documents/MST/list.html

This page contains links to a tremen-
dous range of resources related to the Medieval period: the Medieval Acad-
emy Home Page, the ARTFL Project French Literature, Medieval History Resources Home Page, the Boolean University Medieval Culture Home Page, and many others. You’ll also find links to electronic ver-
sions of various medieval texts, such as Beowulf The Compilation of Phi-
losophy, Boccaccio’s Decameron, and the Magna Carta. As a bonus, the cre-
ators of this page have added links to a number of classical texts, including many of Aristotle’s works.

Community and International Health

http://www.oem.ucdavis.edu/

www.oem.html

Just about everything you want to know about the department of Com-

munal and International Health is found on this page, which includes a department phone directory, monthly calendars, a map of the Davis region, and the department’s location. Fac-

tulty listings are laced with information about qualifications, research inter-

ests, memberships, past positions, honors, awards, and publications. You’ll also find links to the Center for Aging and Health, newsletters, and announcements.

California Aggie Marching Band

http://seclab.cs.ucdavis.edu/~wetmore/cmb/

If your spirit needs a boost, come visit this site. You’ll find photographs of the Aggies, a performance schedule, newsletter, and even some history about the band.

Do you have a home page you would like published? Send your submissions to us at http://pubweb.ucdavis.edu
Distance Educators Create Web Site

Nan Lorenzen, Division of Education

A spin-off group of UC Davis educators from the December conference on Distance Learning and Intercampus Programs has agreed to create a World Wide Web site to serve as a "virtual resource and research center" for technology-based education.

Calling themselves the Distance Learning and Intercampus Programs Interest Group, the educators, who met in February began to implement recommendations from the previous conference. The February meeting was hosted by Meera Blatter, professor in Applied Science, who co-convened the Distance Learning conference in December.

Harry Matthews, a professor in Biological Chemistry, orchestrated development of the Web site (http://moby.ucdavis.edu/Distance), which lists people with relevant knowledge or experience with distance learning to share with others in the UC System. Having decided to include technology-based education through interactive computer programs in their scope, the participants agreed to put examples of courses taught via computers on the site.

UC Davis faculty members currently developing courses offered on computers include Matthews; Richard Falk, a professor in Plant Biology; and Geoffrey Wandsford-Smith, an associate professor in Political Science, to name a few.

Other items discussed include the following:

- Providing online access to information for distance learning material similar to that at the University of North Carolina;
- Creating a distance learning education center offering assistance in both pedagogical issues and technology;
- Importing and exporting classes from other campuses;
- Encouraging educators outside of UC Davis to make suggestions;
- Compiling and circulating studies and evaluations of distance learning.

Another meeting is being planned for March, to be hosted by Richard Walters, professor in Computer Science, who will demonstrate the Remote Teaching Assistant system.

Participating in the February meeting were Blatter; Falk; Matthews; Walters; Evelyn Babey; registrar; Peter Dale of the Provost's Office; Claire Daugherty, College of Engineering; Kenneth Firestein, library teaching coordinator; Barbara Somner, lecturer in Psychology; Maureen McMahon, assistant professor, Division of Education; Keith Prior, academic coordinator, Division of Education; and Michael Reid, associate dean in Environmental and Resource Sciences and Policy.

Gearing Up! Carole A. Barone, Associate Vice Chancellor for Information Technology, recently met with Network 21 project leaders to discuss installation of the fiber optic cable that will form the backbone for the high-speed campus network. She is joined by Network 21 construction manager Jim Burns (right) and Jim Lehoty of Digital Equipment Corporation.

PROJECT UPDATE

Network 21

Alternates Opt In

"Alternates" are those buildings that were originally designated as part of the Network 21 project but, due to the $23 million cap placed on the project last year, were redesignated as "additive alternates." Each affected department was given the option of placing the facilities back in the project via departmental funding. The additive alternate contract approach allowed departments to see the actual costs prior to making a decision.

The deadline to notify Digital Equipment Corporation, the firm hired to install the fiber optic backbone of Network 21, was Feb. 15. Beyond this deadline, inclusion may still be possible, but the cost provided to the primary contacts for inclusion of each of these areas will not be guaranteed. To date, nine of the 15 buildings designated as alternates to the Network 21 project will be included. Those buildings are the Dairy Barn; Private Center Buildings: Administration Building, Animal Lab, and the La Rue Housing Complex.

Boring Technology

Minimizes Disturbances

Don't let the name of this technology deceive you...The boring technology being used on Network 21 is creating some exciting opportunities. Hudson & Poncetta, the subcontractor hired by Digital Equipment Company to forge the conduits that will house the fiber optic cable, is using directional boring to do the job.

Boring, a technology that has been utilized more and more frequently in the last eight to 10 years, minimizes disturbance to ground surface by using electronic signals to guide an underground metal rod. With only a three-person crew and minimal equipment, the direction of the boring head is controlled. Information above ground to create conduits beneath roads and landscapes with minimal disturbance. The technique saves money by reducing environmental impact and, because of the absence of an open trench, provides a higher level of safety for the public.

NAM Modification Begins

With the help of Ever-Green Communications Services, Inc., a firm with an ongoing contract to assist with voice and data installations on campus, NAM (Network Access Module) modification will begin next month. The work consists of modifying approximately 3,800 NAMs to conform to Network 21 10BASE-T standards.

Work is being scheduled in approximately 150 campus buildings and Network 21 primary contacts will be notified as to when modification will take place.

-Aviva Luria

You may receive Network 21 News Briefs electronically by subscribing to the electronic list. To subscribe, please send e-mail to listproc@ucdavis.edu. Leave the subject line blank, and in the body of the message type subscribe net21info <firstname> <lastname>
I.T. CALENDAR

MARCH 1996

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Wireless - Shaping the Future

From Page 1

infrastructure will likely evolve into a seamless blend of computing and networking services that involves wireless networks, notebook (laptop) computers, and Personal Digital Assistants (PDAs). Most likely the “blended” infrastructure will allow you to choose whether or not to plug into the work network based on your physical location. You could, for instance, use a Wide Area Network wireless connection to communicate when in the field and then, from your office, plug into the campus network using more conventional wire-based networking means.

As part of the research being carried out for two community projects — the Davis Community Network and Magic WAND (Wide Area Network Development) — Information Technology has been evaluating wireless technologies for use both on- and off-campus. The research results are found in a feasibility report available on the World Wide Web (http://www.dcn.davis.ca.us/ITC/Research/), and the feasibility of those findings will be tested in a pilot project that will help the campus plan for the use of wireless technologies.

The pilot project will focus on how wireless technologies apply to the “mobile worker” and the “office of the future.” As part of the pilot, Information Technology will develop a demonstration of the faculty office of the future for Odysseus 96, the campus technology showcase scheduled for May. Other demonstrations will focus on how wireless portable docking, wireless LANs, and wireless building-wide networks (e.g., the library), can be utilized by the campus community.

The information gathered during the pilot project will form the basis of a report that will discuss the far-reaching issues surrounding the use of wireless technology — acquisition, installation, configuration, functionality, flexibility, and scalability to a new p.m.

Communications Building, Terence Hall Circle, 752-6888.

Automating FileMaker Pro: Staff Development, 8 a.m. - 5 p.m., 40 Mrak; 752-1766.

Melvyl/Medline: Library Services, 1 - 5 p.m., Carlson Health Sciences Library; register by calling 752-6204 or by e-mail: jawesh@ucdavis.edu.

19 Voice Mail System Training: Managing Your Voice Mail Box: Communications Resources, 10:30 - noon or 1:30 - 3 p.m., University Extension Building 752-6888.

Introduction to Microsoft Word (two-part class offered March 19 & 21): Staff Development, 8:30 - 11:30 a.m., 40 Mrak; 752-1766.

Voice Mail System Training: Managing Your Voice Mail Box: Communications Resources, 10:30 - noon or 1:30 - 3 p.m., University Extension Building. Tercero Hall Circle, 752-6888.

Understanding Mail Merge in WordPerfect: PerfectStaff, Staff Development, 10:30 - 12 noon, 752-1766.

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